

## PSYCHE.

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## CORRESPONDENCE.

BARON C. R. OSTEN SACKEN, in a letter dated at Heidelberg, 9 June 1882, calls attention to observations which he made many years ago, during his residence in Washington, D. C., and which are similar to those recorded by Mr. W. Trelease in the February number of PSYCHE, in an article entitled "Unusual care of ants for aphides."

Baron Osten Sacken has obligingly furnished the following translation of a short article on the subject, which he published in the *Stettiner Entomologische Zeitung*, in 1862 (p. 127-128).

## ANTS AND APHIDES.

Huber made the observation that certain ants erect a kind of shelter for the aphides which they use as milch cows, fastening it to the twig or stem upon which these plant-suckers are living. I do not remember the details of his observations, and have no copy of his work within reach. As far as I know, the observation has not been repeated since; at least when Kirby and Spence speak of it, it is evidently on Huber's authority. I hope, for this reason, that two similar observations, which I made in the United States, may be of some scientific interest.

On a horizontal twig of a juniper (*J. virginiana*), about five feet from the ground, I

observed a colony of a species of *Lachnus*. A small reddish ant with a brown abdomen was diligently working at a tube-shaped structure of a soft, grayish brown, felt-like material, enclosing the twig in a kind of sheath. The material probably consisted of short fibres of liber closely packed together; it had a pitchy smell, burnt well, the smoke having the same smell, but stronger. The structure was about an inch long and one-third of an inch in diameter.

The second case observed by me was near the Berkeley Springs, in Virginia. A black ant had built a globular structure of a sandy material, of about an inch and a half in diameter, around the stem of an *Asclepias*, which was closely packed with aphides. Although the sand was sufficiently mixed with clay to have the necessary consistence, and although several leaf-stalks served as supports, the structure was so brittle that I did not succeed in bringing it home.

## XYLOCOPA AND MEGACHILE CUTTING FLOWERS.

Miss Mary Esther Murtfeldt, of Kirkwood, Mo., writes, 22 June 1882, "I have repeatedly verified your observations on '*Xylocopa* perforating a corolla tube' in no. 93."

This great bee is a serious nuisance in our flower garden. It is especially destructive to the delicate blossoms of *Plumbago capensis*, which are salver-shaped with long, slender tubes. I have seen a single insect slit up, in the manner you describe, as many as fifty blossoms in about ten minutes, very soon ruining the appearance of the plant. It also splits the tubes of the blossoms of the honeysuckles in the same way.

We are also much annoyed by the depredations of a *Megachile* which seems to have a very refined color-sense, cutting the lining for its cells from our choicest and most delicately tinted flowers, being very partial to pink, lavender and pale blues and purples, while it seldom or never touches scarlet or yellow. Plumbagos and pink geraniums are sometimes almost destroyed by it."